

# The Impact of Time Spent Coaching for Teacher Efficacy on Student Achievement

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**Abstract** Coaching for increased teacher efficacy (both instructional and self) has been an essential component to various educational reforms such as No Child Left Behind; Reading First projects and Early Reading First Projects. Those seeking to improve teacher performance leading to enhanced student outcomes on various state assessments have also incorporated coaching into the methodology. The purpose of this study was to look at the linkage between hours spent coaching teachers in the classroom for efficacy in content instruction and child achievements/outcomes. A significant correlation was seen in year one between the time coaches spent in the classroom and students' alphabet recognition scores. The coaching model for year one was one that focused coaching for instructional efficacy in specific content and teaching methods and saw the coaches directly facilitate and support theory to practice. In year two and three, no significant correlation was found. Year two and three used a coaching model which was less specific in focus and increased time spent on site with teachers. The implications for coaching practice includes balancing time between four components to effective coaching; (1) instructing for specific content, (2) modeling techniques and instructional practices, (3) observing teacher practices and (4) consulting for reflection.

**Keywords** Coaching · Literacy instruction · Preschool

A teacher's ability to see him/herself as capable of providing instruction within a content area and for the instruction provided to impact on student achievement provides the underpinning of teacher efficacy. Teacher efficacy can be

defined as a judgment of personal competence in light of an analysis of the task (Tschannen-Morean et al. 1998). A teacher's sense of efficacy has proven to be a powerful indicator of how much time teachers spend in teaching content (Gibson and Dembo 1984) and ultimately student outcomes (Ashton and Webb 1986; Guskey 1984). Teacher efficacy can be seen in both curriculum and instructional practices.

Coaching for increased teacher efficacy (both self-efficacy and instructional efficacy) has been an essential component to various educational reforms such as No Child Left Behind; Reading First projects and Early Reading First Projects. Those seeking to improve teacher performance leading to enhanced student outcomes on various state assessments have also incorporated coaching into the methodology. The purpose of this study was to look at the linkage between hours spent coaching teachers in the classroom for efficacy in content instruction and child achievements. Two hypotheses guided this work: (1) there will be a correlation in the number of hours spent coaching for instructional efficacy in a classroom and child outcomes on Alphabet Letter-Identification and (2) there will be a correlation in the number of hours spent coaching for instructional efficacy in a classroom and child outcomes in gains between a pre-intervention and post-intervention assessment on standard scores on the Peabody Picture Vocabulary Test-III.

Two variables may be seen as moderating variables; the education level a teacher has obtained and the years of experience in teaching. The possible effect of these variables will be considered in the analysis.

## Literature Review

Teachers with a high level of instructional efficacy believe more whole-heartedly in children's ability to be successful

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and devote more time and effort to teaching. They teach a subject more clearly and with a more interesting delivery, and produce better outcomes (Vartuli 2005). They also show more persistence in working with students and show more openness to new ideas to meet the needs of the children within their classrooms (Berman et al. 1977; Guskey 1988; Stein and Wang 1988). They are more able to look first at their own practices when working to change a failed situation (Vartuli 2005). Teachers who believe in themselves, expect more from themselves. They are more able to look first at their own practices when working to change a failed situation (Vartuli 2005). Conversely teachers with low self-efficacy attribute children's academic struggles to lack of abilities, insufficient motivation, character deficiencies, and poor home environments (Ashton and Webb 1986). Precedence is no longer given to only those children who are perceived to be capable and denied to those children who may struggle (Midgley et al. 1989).

Guskey (1984) found greater teacher efficacy resulted in not only more positive attitudes about teaching but also a higher level of confidence in specific content teaching abilities. Targeted instruction in a specific content area can enhance the confidence the teacher feels in delivery of that instruction thus increasing efficacy. Content-based instruction to increase efficacy must be organized around specific bodies of knowledge, as opposed to general abilities in order to be applied (Resnick 1987).

RAND, in 1976, published an investigation into the impact of teacher efficacy on student achievement in reading programs and interventions within schools serving minorities students. Armor et al. (1976) examined the efficacy beliefs of teachers delivering reading instruction and found teacher efficacy to be strongly related to the variations within students' success on assessments related to reading achievements. Ashton and Webb (1986) also identified a significant impact of teacher efficacy on student achievement on a mathematics assessment administered to secondary students.

Producing change and sustaining change in efficacy beliefs among teacher practitioners seems to provide the most challenge to professional development personnel (Ross 1992). Building efficacy for teacher practitioners can take many shapes. Providing instructional sessions or professional development days have long dominated the model for increasing competence within content areas or teaching deliveries. Effective professional development, according to Strickland and Riley-Ayers (2007) occurs on site, as close in proximity as possible to the very classrooms where it is to be employed. Initiating the training at school/center sites and then allowing for the reinforcement of this new learning in the classroom helps teachers remain engaged. Adult learning theory holds that adults (teachers) must be

allowed to move through the learning process at their own pace; they also need to be allowed time for repeated and guided practice of their new skills. Teachers must unlearn old habits and replace them with new behaviors. This will require reflection on existing practices. Coaches can be employed to assist teachers in moving through this process. Effective professional development suggests that access to someone who can help is imperative. This allows teachers more support and encouragement as well as freedom and latitude to try a new technique, employ a new strategy, or focus on a content area (Tschannen-Morean et al. 1998). A more complete picture of what predicts or determines teacher efficacy is needed. Determining ways in which to build teacher efficacy throughout their careers would prove to be a worthwhile endeavor when looking to accelerate student achievement. Although few previous studies have linked teacher efficacy to coaching, such a link is in fact credible (Ross 1992, p. 52).

Ross (1992) investigated the link between student achievement and teacher interactions with a coach. Ross hypothesized that student achievement would be higher in the classrooms of teachers who interacted more extensively with their coaches and was confirmed. Student achievement was positively correlated with the use of personnel resources which was represented by coaches (Ross 1992, p. 57). Tschannen-Morean et al. (1998) also found that close, consistent modeling increased levels of efficacy reported by teachers.

A coaching program in Kansas working with classroom teachers asked participants to respond to a survey question that linked coaching to efficacy. The statements "I am more certain about my teaching practices after I watch my instructional coach in my classroom" and "I am more confident about teaching *Pathways to Success* intervention after I watched my IC" saw an overwhelming positive response. Teachers were asked to rank their response on a scale of 1–7 (1 = strongly disagree and 7 = strongly agree). The combined mean for the responses to the two statements was reported at 6.51 (Knight 2007).

The time spent in interaction and types of interaction between a coach and a teacher often determines the outcomes for building efficacy. Toll (2006) uses the time spent with teachers as well as the types of interactions in distinguishing between coaching and co-teaching and in distinguishing between the two in student outcomes. Coaching, according to Toll (2006), engages the teacher and the coach for 1–2 h per week or every other week. Comparatively, co-teaching sees professional development personnel interacting with the teacher in the classroom two or more hours per day, over days and or weeks. In coaching, conversations are focused on specific goals, with each participant listening and observing one another to gather information which will lead to a plan for accomplishing

those specified goals. In co-teaching, these observations and conversations are broader and engage all aspects of teaching. The outcomes are also directly related to the model employed. In coaching, a single goal is identified and is the focus whereas in co-teaching over-all teaching success is the focus and therefore the outcome sought.

Toll (2006) also suggests that the time needed to co-teach results in most support models relying on coaching which is less time consuming. In looking at the results of multiple studies illuminating the link between teacher efficacy and student outcomes and then adding the notion of an impact of coaching on teacher efficacy, the question becomes: does more time spent by coaches with teachers in classrooms magnify the results of building teacher efficacy as reflected in student achievement? A more complete picture of what determines teacher efficacy is needed. Determining ways in which to build teachers' efficacy (both self and instructional) would prove to be a worthwhile endeavor when looking to accelerate student achievement.

## Research Design

### *Overall Design*

Participants were 360 children enrolled in 12 classrooms in a Head Start program located in Central Florida over a 3 year period. The classroom teaching staff were paid a stipend for participating in the program. Classrooms within the Head Start program were chosen based on their participation in a full-day program at the onset of the project. Nine classrooms were enrolled in the program for each year of the 3 year project. Seven of the nine original classes included a full-day program with the other two original classrooms being located on the same school site as another classroom participating in the full-day program. All classrooms are housed in elementary schools within the same school district. Demographics for these classrooms were obtained from the school district's website which individualizes each elementary school's demographics. Of the total 2,911 children served by the five schools which house the Head Start classrooms, a very small percent are Asian/Pacific Islander or American Indian/Alaskan, 0.72%. Black, non-Hispanic children make up 49%, Hispanic children make up 27%, children who identify as multi-racial make up 5%, and Caucasian, non-Hispanic children make up 18% of the total population within the schools. Of the 2,911 children served by the elementary school, 90% are placed in an economically disadvantaged category, 16.8% are English Language Learners, and 15.8% are students with disabilities.

Each classroom was assigned a coach who was specifically educated on the curriculum that would be in place for the 3 years of the program and chosen for their years of

experience working with preschool classrooms. The education level of the three coaches consisted of two Bachelor-degreed coaches in early childhood education with 7 years of experience in coaching teachers. The third coach holds a doctoral degree in curriculum and instruction with 18 years in teacher education. The coaches were randomly assigned to the classrooms prior to meeting the teaching staff or the children. Each classroom consisted of two teaching staff members. Education for the teaching staff ranged from Bachelor's degree to high school education with specialized training. Comparing the time spent with teachers in the classroom in coaching with the impact on student achievement will provide a format for the investigation of the issue of time and type of interaction between coach and teacher (spent in coaching for efficacy) impacting teacher efficacy in content instruction and ultimately the impact on student achievement. The coaching model was implemented for 3 years with each year's "time spent" both in the classroom coaching and "time spent" outside of the classroom being different.

### *Year One*

The teaching staff in each classroom attended a college-level course in emergent literacy. Emphasis was placed on teaching vocabulary, enhancing oral language skills, teaching children about print, and in research supporting the connection of alphabet letter recognition with reading success. Teachers attended approximately 40 h of classroom instruction. After each session, coaches visited the classroom and emphasized the learning in the coursework as well as model practices that support instruction in emergent literacy, supporting the transfer of theory to practice. Coaches began to focus on the content area, literacy instruction.

### *Year Two*

In year two of the partnership, the coaches spent more time in the classrooms with the teachers, coaching on general teaching matters as well as instruction of literacy. Examples included guidance issues, room arrangement, scheduling, lesson planning, etc. The time coaches spent in the classroom was at least 6–10 h per week for more than a 9 month timeframe. Teachers attended various sessions throughout the 9 month time frame on general classroom issues.

### *Year Three*

In year three, coaches spent less time in the classroom than in year two, but more time than in year one. Classroom instruction was also reduced compared with the previous

2 years but included various curriculum areas (math, science, literacy).

## Assessments

Children within the classrooms were assessed using the Peabody Picture Vocabulary Test-III (PPVT-III) as well as an Alphabet Letter Recognition assessment (letter-id) given by an outside agency with certified assessors. The children were assessed at the beginning of each year (pre-intervention) and again at the end of each year (post-intervention). Using the result of the pre-intervention and the post-intervention standard scores on the PPVT-III, a “gain score” for the PPVT-III for each child was calculated. For each year, ranks were determined for (1) the hours coaches spent in classrooms and the child outcomes (2) gain scores and (3) letter id scores. A ranking of one for “hours coaching” indicated the classroom that received the most coaching through a ranking of nine which indicated a classroom receiving the least amount of hours. A ranking of one in “Gain” scores indicated a classroom with the highest mean gain score within the nine classrooms through a ranking of nine which indicated the classroom with the lowest mean score. A ranking of one in “letter id” indicated the classroom with the highest mean score in alphabet letter identification through a ranking of nine which indicated the classroom with lowest mean score in alphabet letter identification. The raw scores were transformed into standard *z*-scores.

The non-parametric bivariate procedure of Kendall’s *τ<sub>b</sub>*, correlation coefficients with their significant levels was computed using the SPSS, a software package for manipulation and statistical analysis of data (Steinberg 2008). The main advantages of using Kendall’s *τ<sub>b</sub>* are that the distribution of this statistic has slightly better statistical properties, allows for ties in rankings, and there is a direct interpretation in terms of probabilities of observing concordant and discordant pairs (Conover 1980). A hierarchical linear model (HLM) was used for regression analysis performed to determine the effect of the two mitigating variables.

## Results

### Year One

Assessments were administered to the children in May of year one. The mean scores for the children (in each of the nine classrooms) for each of the assessments used to compare coaching hours and student achievement, were calculated (see Tables 1, 2). The range for the mean amount of alphabet letters recognized per classroom was

determined to be 21.5000 [ranked one] to 11.250 [ranked nine] ( $n = 115$ ). The range of the means per classroom for the gain score was calculated at 8.8600 [ranked one] to −1.9474 [ranked nine] ( $n = 123$ ). The range for hours spent coaching was 52 [ranked one] to 8.5 [ranked nine].

Analysis on ranks for the hours spent coaching and ranks for “gain score” and “letter-id” were performed using Kendall’s *τ<sub>b</sub>*. The results of alphabet letter recognition skills and hours spent coaching proved to include a significant correlation. Kendall’s *τ<sub>b</sub>* was calculated at 0.592 (95% CI, 0.45–0.734). The confidence interval was based on the most commonly used form of the variance of *txy* (computed at .0709) which is based on the random permutation of *x* and *y*. This indicates, with 95% confidence, that the rankings of coaching hours and letter identification are at least 45% more likely to be like in their rankings than unlike and possibly as much as 73% more like in their rankings than unlike. Those classrooms receiving higher amounts of hours in coaching were likely to see higher outcomes on the child achievement measure, alphabet letter recognition. For year one data, rejecting null hypothesis one, there will be no correlation in ranks between the number of hours spent coaching and child outcomes on alphabet letter identification, can be done with 95% certainty of not making a Type 1 error.

Analysis on ranks for the hours spent coaching and ranks for “gain score” was also performed using Kendall’s *τ<sub>b</sub>* (see Table 3). No significant correlation between rank for means per classroom of PPVT-III gain scores and hours coaching per classroom was found.

### Year Two

Assessments were administered to the children in August of year two and again in May. The mean scores for the children, in each of the nine classrooms, for each of the assessments used to compare coaching hours and student achievement, were calculated (see Tables 2, 3). The range for the mean amount of alphabet letters recognized per classroom was determined to be 23.08 to 10.00 ( $n = 128$ ). The range of the mean per classroom for the gain score was calculated at 13.46 to 1.17 ( $n = 116$ ). The range for hours spent coaching was 241 to 60.

Analysis on ranks for the hours spent coaching and ranks for “gain score” and “letter-id” using Kendall’s *τ<sub>b</sub>* found no significant correlation between rank for means per classroom of alphabet letter recognition or gain scores and hours coaching per classroom (see Table 3).

### Year Three

Assessments were administered to the children in August of year three and again in May. The range for the mean

**Table 1** Means, standard deviations, number of children, and ranking for time spent by classroom for gain scores for 3 year project

Classrooms	1	2	3	4	5	6	7	8	9	10	11	12
Year 1: gain scores $n = 123$												
Mean	1.56	1.12	NA <sup>a</sup>	6.07	NA <sup>a</sup>	−0.15	3.60	−1.95	1.85	2.50	NA <sup>a</sup>	8.86
SD	6.60	9.604		8.08		6.22	6.89	10.99	7.20	12.40		8.98
$n$	16	17		14		13	15	19	13	16		13
Rank	6	7		2		8	3	9	5	4		1
Year 2: gain scores $n = 133$												
Mean	10.08	8.3	NA <sup>a</sup>	7.56	NA <sup>a</sup>	1.17	8.64	5.76	13.46	NA <sup>a</sup>	1.67	2.67
SD	0.56	8.68		18.05		8.28	10.28	14.14	14.47		14.42	11.99
$n$	16	15		14		15	18	13	14		14	14
Rank	2	4		5		9	3	6	1		8	7
Year 3: gain scores $n = 116$												
Mean	0.56	0.93	13.26	11.14	8.86	2.14	2.93	9.89	13.61	NA <sup>a</sup>	NA <sup>a</sup>	NA <sup>a</sup>
SD	7.54	7.24	9.05	7.45	9.08	7.08	8.44	8.59	10.17			
$n$	12	10	9	17	12	12	14	17	13			
Rank	9	8	2	3	5	7	6	4	1			
Three-Year (overall) $n = 372$												
Mean	3.52	2.76	1.67	8.22	2.67	1.08	4.98	4.23	9.64	2.50	13.58	8.86
SD	9.05	9.11	9.05	10.25	9.09	11.80	8.11	11.07	11.97	12.40	14.47	11.99
$n$	43	42	9	45	12	39	44	54	39	16	18	14
Rank	7	8	11	4	9	12	5	6	2	10	1	3
Number and (Rank) classrooms for hours (rounded)												
Year 1	35 (5)	27 (6)	NA <sup>a</sup>	52 (1)	NA <sup>a</sup>	44 (3)	8 (9)	24 (8)	40 (4)	24 (7)	NA <sup>a</sup>	51 (2)
Year 2	130 (4)	156 (2)	NA <sup>a</sup>	138 (3)	NA <sup>a</sup>	108 (6)	107 (7)	80 (8)	241 (1)	NA <sup>a</sup>	60 (9)	117 (5)
Year 3	63 (8)	83 (4)	80 (5)	91 (3)	63 (7)	59 (9)	94 (2)	78 (6)	188 (1)	NA <sup>a</sup>	NA <sup>a</sup>	NA <sup>a</sup>
3 years	229 (4)	266 (3)	83 (10)	282 (2)	63 (11)	212 (5)	209 (6)	183 (7)	469 (1)	108 (9)	60 (12)	168 (8)

<sup>a</sup> Refers to classroom not in session for the given year

amount of alphabet letters recognized per classroom was determined to be 23.14 to 13.67 ( $n = 145$ ). The range of the mean per classroom for the gain score was calculated at 13.62 to .56 ( $n = 133$ ). The range for hours spent coach was 188 to 59.5.

Analysis on ranks for the hours spent coaching and ranks for “gain score” and “letter-id” were performed using Kendall’s  $\tau_b$  finding no significant correlation between rank for means per classroom of alphabet letter recognition or mean gain scores and hours coaching per classroom (see Table 3).

#### Moderating Variables HLM Regression Analysis Year 1–3

The education level of the teachers was predicted to be a moderating variable. A Hierarchical Linear Model Regression analysis was calculated to investigate the relationship of the effect of the education level and years spent in the preschool classroom may have on alphabet letter recognition and gain scores for the children. The resulting  $t$ -ratios proved statistically insignificant for letter id scores

and level of education (see Table 4). The results indicated that only 11% of the variance in alphabet letter recognition scores between classrooms could be explained by the levels of education obtained by the teaching team and the years they had spent teaching. Fourteen percent of the variance in gain scores could be explained by the levels of education completed by the teaching team and the years experience in teaching they had obtained. These results leave a great deal of variance unaccounted. The analysis leading to the conclusion that the education levels of the teachers or the years spent teaching did not make a statistically significant unique contribution to the child outcomes; alphabet letter recognition or gain scores.

#### Three Years: Combining Year 1, Year 2, and Year 3

After analyzing each year independently, another analysis was done for the combined outcome measures for each classroom. During the 3 year project, additional teachers joined the group while others left. The 3 year analysis was done using each classroom as a separate intervention/case resulting in 12 classrooms. The mean scores for the

**Table 2** Means, standard deviations, number of children, and ranking for time spent by classroom for letter id for 3 year project

Classrooms	1	2	3	4	5	6	7	8	9	10	11	12
Year 1: letter id $n = 129$												
Mean	21.50	15.47	NA <sup>a</sup>	20.64	NA <sup>a</sup>	16.2	11.68	11.89	13.70	11.12	NA <sup>a</sup>	18.93
SD	7.86	8.72		7.67		8.30	10.01	10.54	10.02	10.22		10.20
$n$	16	15		14		10	15	19	10	16		13
Rank	1	5		2		4	8	7	6	9		3
Year 2: letter id $n = 133$												
Mean	23.08	18.57	NA <sup>a</sup>	17.33	NA <sup>a</sup>	19.93	14.14	16.44	17.23	NA <sup>a</sup>	10	17.57
SD	3.13	7.61		10.14		9.69	8.67	7.38	9.27		11.14	8.75
$n$	14	19		15		15	19	15	18		16	14
Rank	1	3		5		2	8	7	6		9	4
Year 3: letter id $n = 142$												
Mean	23.14	16.05	15.44	15.38	18.93	13.67	17.93	17.37	20.53	NA <sup>a</sup>	NA <sup>a</sup>	NA <sup>a</sup>
SD	4.29	7.33	8.72	9.72	9.20	8.10	9.53	9.18	10.30			
$n$	13	14	13	15	14	14	14	18	13			
Rank	1	6	7	8	3	9	4	5	2			
Three-Year (overall) $n = 427$												
Mean	22.5	16.61	10	17.67	17.57	16.56	14.59	15.21	17.61	11.13	15.44	18.93
SD	5.56	7.84	8.72	9.70	9.20	9.18	9.89	9.64	9.56	10.22	9.27	8.56
$n$	94	48	12	45	14	39	44	56	38	16	18	14
Rank	1	6	12	3	5	7	10	9	4	11	8	2
Number and (Rank) Classrooms for Hours (rounded)												
Year 1	35 (5)	27 (6)	NA	52 (1)	NA	44 (3)	8 (9)	24 (8)	40 (4)	24 (7)	NA	51 (2)
Year 2	130 (4)	156 (2)	NA	138 (3)	NA	108 (6)	107 (7)	80 (8)	241 (1)	NA	60 (9)	117 (5)
Year 3	63 (8)	83 (4)	80 (5)	91 (3)	63 (7)	59 (9)	94 (2)	78 (6)	188 (1)			
3 years	229 (4)	266 (3)	83(10)	282 (2)	63 (11)	212 (5)	209 (6)	183 (7)	469 (1)	108 (9)	60 (12)	168 (8)

<sup>a</sup> Refers to classrooms not in session for the year

**Table 3** Results of Kendall's  $\tau_b$  (rank correlation)

	Coefficient	Covariance	P-value
Year 1: hours coaching			
Letter id	0.592	7.500	0.028 <sup>a</sup>
Gain score	0.254	3.000	0.345
Year 2: hours coaching			
Letter id	0.551	5.500	0.064
Gain score	0.254	3.000	0.345
Year 3: hours coaching			
Letter id	0.056	1.000	0.835
Gain score	0.444	4.125	.0950
3-Years: hours coaching			
Letter id	0.382	6.045	0.086
Gain score	0.107	5.182	0.630

<sup>a</sup> Correlation is significant at the 0.05 level (2 tailed)

children, in each of the twelve classrooms, for each of the assessments used to compare coaching hours and student achievement, were calculated (see Tables 1, 2). The range for the mean amount of alphabet letters recognized per classroom was determined to be 22.500 to 10.000

**Table 4** HLM regression for teacher education level and years spent teaching for child outcomes

	Coefficient	Standard error	P-value
Letter id: child outcome			
Education	−0.186	0.215	0.411
Years Teaching	−0.004	0.026	0.896
Gain score: child outcome			
Education	−0.115	1.543	0.497
Years Teaching	0.023	0.026	0.393

( $n = 427$ ). The range of the mean per classroom for the gain score was calculated at 13.58 to 1.08 ( $n = 372$ ). The range for hours spent coach was 469.5 to 60. No significant correlation between rank for means per classroom of alphabet letter recognition or mean gain scores and hours coaching per classroom was found (see Table 3).

## Discussion

This study served to investigate the linkage between time spent on site coaching teachers for instructional and self-



efficacy and child outcomes. The question guiding this study was: Does more time spent with teachers in the classroom result in higher child outcomes? A significant correlation was seen in year one in the time coaches spent in the classroom and alphabet letter recognition. The model for year one was one that focused coaching for instructional efficacy in specific content and teaching methods and saw the coaches directly facilitate and support theory to practice. In years two and three, while more time was spent in the classroom coaching teachers, the focused instruction on content was less directed toward measured child outcomes. In analyzing this 3 year project, it has become clear that a more focused, honed approach to coaching teachers in enhancing child outcomes in specific measures was more effective.

A similar effect was seen in the coaching project in Kansas regarding the focus of a coach from teachers' perspective. Survey questions asked teachers to rate their perceptions of coaches' skill as it relates to their jobs as classroom teachers. The teachers were asked to rate on a scale of one to seven (one indicating strong disagreement with the statement to seven indicating strong agreement):

1. "My IC (coach) does not know all of my subject matter well enough to teach everything I teach"
2. "There is some content in my class that my IC (coach) is not capable of teaching".

The teachers rated these items with a mean of 3.18. Knight (2007) concluded this to suggest teachers see coaches "less than helpful" when they move past their role of instruction in specific content, model-lesson implementation, and reflection.

### Implication for Practice

It is imperative to build levels of teacher efficacy as they move toward best practices in the classroom. To do so coaches need to focus on specific content, model techniques and instructional practices, observe teacher practices, and dedicate consultative hours to working with teachers when children are not present in order to better facilitate reflection. This type of coaching has also been labeled "cognitive coaching". Coaches work together with teachers in navigating a teacher's thinking and behavior toward a specified goal. Coaches need to see their role in the classroom as supporting and facilitating the "dialogical dimension to teachers' learning as well as facilitating new practices (Day 1993).

Instructing teachers in a content area, while facilitating and supporting new practices, enables teachers to move theory into practice. In order for new methods and enhanced instruction to be applied they must be organized around specific bodies of knowledge as opposed to general

abilities (Resnick 1987). Teachers also benefit from content which has been tailored to their individual situation as they are encouraged to engage in critical reflection. It is imperative to balance time spent with teachers in each component of effective coaching:

- Instructing for specific content
- Modeling techniques and instructional practices
- Observing teacher practices
- Consulting for reflection

Observing another "credible" person using the new strategy and then teachers attempting and ultimately mastering the experience is the most powerful source of building teacher efficacy (Tschannen-Morean et al. 1998).

Too little time in any component of effective coaching leaves issues unresolved, too much time can cause the focus to become diluted. A coach spending too much time in the classroom can overwhelm or over-stimulate a classroom teacher. An additional caution lies in the coach beginning to see a classroom as their own and a teacher relinquishing that ownership. Many coaches struggle with the notion of how much time to spend on site in the classroom with a teacher. The results of this study and findings of others imply that more time is not always better. It is the type and quality of interaction that becomes a deciding factor.

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